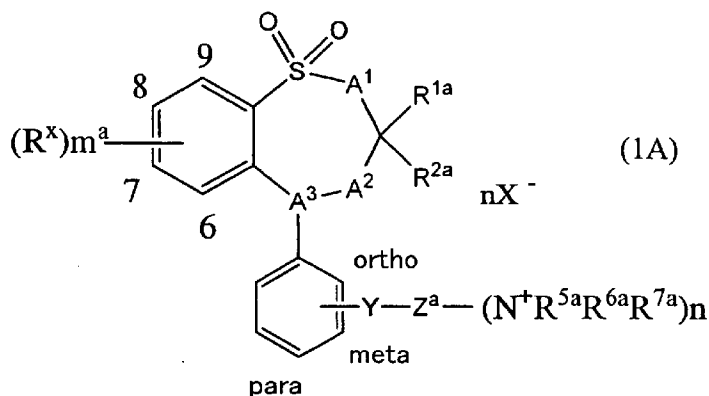


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A compound represented by the following formula (1A):



wherein,

R^{1a} and R^{2a} may be the same as or different from each other and each represents alkyl group having 1 to 10 carbon atoms, alkenyl group having 2 to 10 carbon atoms or alkynyl group having 2 to 10 carbon atoms;

m^a is an integer of 0 to 4;

R^x represents halogen atom, nitro group, amino group, cyano group, hydroxy group, carboxy group, -CONH₂, -SO₃H, -NR³R⁴,

[[[]]R³ and R⁴ may be the same as or different from each other and each represents alkyl group having 1 to 5 carbon atoms[[[]]], alkyl group having 1 to 10 carbon atoms, alkenyl

group having 2 to 10 carbon atoms or alkynyl group having 2 to 10 carbon atoms; wherein the alkyl group, the alkenyl group and the alkynyl group may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, piperidyl, pyrrolidyl, morpholyl, cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; one or more methylenes which constitute the alkyl group, the alkenyl group and the alkynyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{O}-$, $-\text{S}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^{8a}-$, and $-\text{N}^+\text{W}^{\text{a-}}\text{R}^{9a}\text{R}^{10a}-$ $[[[]]$,

R^{8a} represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms; the alkyl group and the alkenyl group in R^{8a} may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl,

R^{9a} and R^{10a} may be the same as or different from each other and each represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms, and may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl $[[.]]$, and

$\text{W}^{\text{a-}}$ represents a counteranion $[[.))]]$;

the combination of $(\text{A}^1, \text{A}^2, \text{A}^3)$ represents ~~$(\text{CH}_2, \text{NH}, \text{CH})$~~ , $(\text{CH}_2, \text{CH}(\text{OH}), \text{CH})$, ~~$(\text{NH}, \text{CH}(\text{OH}), \text{CH})$~~ or ~~$(\text{CH}_2, \text{CH}_2, \text{N})$~~ ;

Y represents any of $-\text{NHCS}-$, $-\text{NHCSNH}-$ or $-\text{NHCSO}-$, wherein $-\text{NH}$ of $-\text{NHCS}-$ represents a bond which binds to the

adjacent benzene ring and CS- represents a bond which binds to the adjacent Z^a , and -NH of -NHCSO- represents a bond which binds to the adjacent benzene ring and CSO- represents a bond which binds to the adjacent Z^a ;

$Z^a-(N^+R^{5a}R^{6a}R^{7a})_n$ represents an alkyl group or alkenyl group having 2 to 10 carbon atoms which is substituted with $-N^+R^{5a}R^{6a}R^{7a}$, the number of the ~~substituent~~ substituents being n; wherein one or more methylenes which constitute Z^a may be replaced with any of phenylene which may have a substituent or -O-; wherein the substituent(s) in the phenylene which may have the substituent are 1 to 4 substituents selected from the group consisting of alkyl groups having 1 to 5 carbon atoms, alkoxy groups having 1 to 5 carbon atoms, nitro group, halogen atoms, trifluoromethyl group and $-\text{CH}_2N^+R^{5a}R^{6a}R^{7a}$; wherein the substituents may be the same as or different from each other; and wherein n is an integer of 1 or 2; and

each of $N^+R^{5a}R^{6a}R^{7a}$ is independently any of the following I), II) or III):

I) R^{5a} , R^{6a} and R^{7a} may be the same as or different from one another, and each represents alkyl group having 1 to 10 carbon atoms, alkenyl group having 2 to 10 carbon atoms or alkynyl group having 2 to 10 carbon atoms; wherein the alkyl group, the alkenyl group and the alkynyl group may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, piperidyl, pyrrolidyl, morpholyl, cycloalkyl

having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; and wherein one or more methylenes which constitute the alkyl group, the alkenyl group and the alkynyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{O}-$, $-\text{S}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^8-$, and $-\text{N}^+\text{W}^-\text{R}^9\text{R}^{10}-$ [[.]],

R^8 represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms. ~~The~~, the alkyl group and the alkenyl group in R^8 may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl[[.]],

R^9 and R^{10} may be the same as or different from each other and each represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms, and may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl[[.]], and

W^- represents a counteranion[[.]];

II) $\text{N}^+\text{R}^{5a}\text{R}^{6a}\text{R}^{7a}$ represents a monocyclo or bicyclo ring formed of 4 to 9 carbon atoms in addition to the ammonium nitrogen atom, with a proviso that a position of binding to Z^a is the ammonium nitrogen atom; wherein, in the monocyclo and bicyclo rings, one of the carbon atoms which constitutes the ring may be replaced with any of oxygen, nitrogen or sulfur atom; and the monocyclo and bicyclo rings may be substituted with one or more groups of hydroxy, oxo, thioxo, cyano, phenyl, naphthyl, thienyl,

pyridyl, cycloalkyl having 3 to 7 carbon atoms, carboxy, $-\text{CONH}_2$, $-\text{SO}_3\text{H}$ and $-\text{R}^{11}$, [[(]]

R^{11} represents alkyl group having 1 to 8 carbon atoms or alkenyl group having 2 to 8 carbon atoms. ~~The, the~~ alkyl group and the alkenyl group in R^{11} may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, piperidil, pyrrolidyl, morpholyl, cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; and one or more methylenes which constitute the alkyl group and the alkenyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{O}-$, $-\text{S}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^8-$, and $-\text{N}^+\text{W}^-\text{R}^9\text{R}^{10}$; R^8 , R^9 , R^{10} and W^- are the same as the above [[(]]; and the group which is not involved in the formation of the monocyclo ring and the bicyclo ring in R^{5a} , R^{6a} and R^{7a} is the same as the above I); and

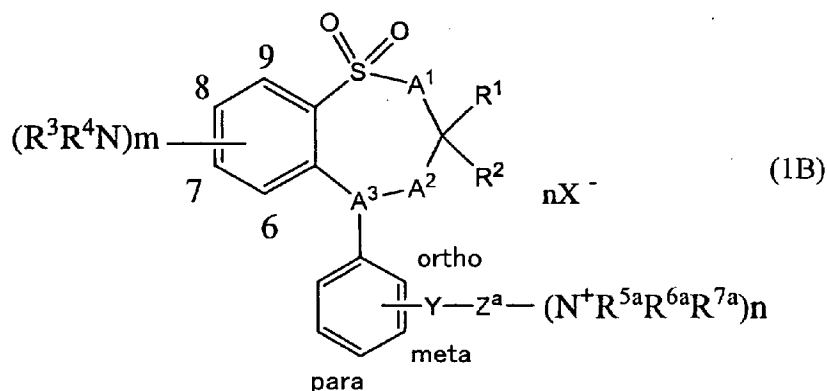
III) $\text{N}^+\text{R}^{5a}\text{R}^{6a}\text{R}^{7a}$ represents a pyridinium ring, a quinolinium ring or an isoquinolinium ring with a proviso that a position of binding to Z^a is the ammonium nitrogen atom; wherein the pyridinium ring, the quinolinium ring and the isoquinolinium ring may be substituted with one or more groups of cyano, nitro, phenyl, naphthyl, thienyl, pyridyl, cycloalkyl having 3 to 7 carbon atoms, alkoxy having 1 to 5 carbon atoms, carboxy, $-\text{CONH}_2$, $-\text{SO}_3\text{H}$, halogen, hydroxy, tetrahydropyranyl and $-\text{R}^{12a}$, [[(]]

R^{12a} represents alkyl group having 1 to 9 carbon atoms or alkenyl group having 2 to 9 carbon atoms. ~~The, the~~ alkyl group

and the alkenyl group in R^{12a} may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; and one or more methylenes which constitute the alkyl group and the alkenyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{S}-$, $-\text{O}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^8-$, and $-\text{N}^+\text{W}^-\text{R}^9\text{R}^{10}-$;

R^8 , R^9 , R^{10} and W^- are the same as the above[[]]; and X^- represents a counteranion.

2. (currently amended) A compound represented by the following formula (1B):



wherein,

R^1 and R^2 may be the same as or different from each other and each represents alkyl group having 1 to 10 carbon atoms;

m is an integer of 1 or 2; [[and]]

~~$R^3, R^4, A^1, A^2, A^3, Y, Z^a-(N^+R^{5a}R^{6a}R^{7a}), n$ and X^- are the same as the above~~

R^3 and R^4 may be the same as or different from each other and each represents alkyl group having 1 to 5 carbon atoms, alkyl group having 1 to 10 carbon atoms, alkenyl group having 2 to 10 carbon atoms or alkynyl group having 2 to 10 carbon atoms; wherein the alkyl group, the alkenyl group and the alkynyl group may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, piperidyl, pyrrolidyl, morpholyl, cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; one or more methylenes which constitute the alkyl group, the alkenyl group and the alkynyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{O}-$, $-\text{S}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^{8a}-$, and $-\text{N}^+\text{W}^a-\text{R}^{9a}\text{R}^{10a}-$,

R^{8a} represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms; the alkyl group and the alkenyl group in R^{8a} may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl,

R^{9a} and R^{10a} may be the same as or different from each other and each represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms, and may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl, and

W^{a-} represents counteranion;

the combination of (A¹, A², A³) represents (CH₂, CH(OH), CH);

Y represents any of -NHCS-, -NHCSNH- or -NHCSO-, wherein -NH of -NHCS- represents a bond which binds to the adjacent benzene ring and CS- represents a bond which binds to the adjacent Z^a, and -NH of -NHCSO- represents a bond which binds to the adjacent benzene ring and CSO- represents a bond which binds to the adjacent Z^a;

Z^a-(N⁺R^{5a}R^{6a}R^{7a})_n represents an alkyl group or alkenyl group having 2 to 10 carbon atoms which is substituted with -N⁺R^{5a}R^{6a}R^{7a}, the number of the substituents being n; wherein one or more methylenes which constitute Z^a may be replaced with any of phenylene which may have a substituent or -O-; wherein the substituent(s) in the phenylene which may have the substituent are 1 to 4 substituents selected from the group consisting of alkyl groups having 1 to 5 carbon atoms, alkoxy groups having 1 to 5 carbon atoms, nitro group, halogen atoms, trifluoromethyl group and -CH₂N⁺R^{5a}R^{6a}R^{7a}; wherein the substitutents may be the same as or different from each other; and wherein n is an integer of 1 or 2; and

each of N⁺R^{5a}R^{6a}R^{7a} is independently any of the following I), II) or III):

I) R^{5a}, R^{6a} and R^{7a} may be the same as or different from one another, and each represents alkyl group having 1 to 10

carbon atoms, alkenyl group having 2 to 10 carbon atoms or alkynyl group having 2 to 10 carbon atoms; wherein the alkyl group, the alkenyl group and the alkynyl group may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, piperidyl, pyrrolidyl, morpholyl, cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; and wherein one or more methylenes which constitute the alkyl group, the alkenyl group and the alkynyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{O}-$, $-\text{S}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^8-$, and $-\text{N}^+\text{W}^-\text{R}^9\text{R}^{10}-$,

R^8 represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms, the alkyl group and the alkenyl group in R^8 may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl,

R^9 and R^{10} may be the same as or different from each other and each represents alkyl group having 1 to 5 carbon atoms or alkenyl group having 2 to 5 carbon atoms, and may be substituted with one or more groups of phenyl, cycloalkyl having 3 to 7 carbon atoms and hydroxyl, and

W^- represents a counteranion;

II) $\text{N}^+\text{R}^{5a}\text{R}^{6a}\text{R}^{7a}$ represents a monocyclo or bicyclo ring formed of 4 to 9 carbon atoms in addition to the ammonium nitrogen atom, with a proviso that a position of binding to Z^a is the ammonium nitrogen atom; wherein, in the monocyclo and bicyclo

rings, one of the carbon atoms which constitutes the ring may be replaced with any of oxygen, nitrogen or sulfur atom; and the monocyclo and bicyclo rings may be substituted with one or more groups of hydroxy, oxo, thioxo, cyano, phenyl, naphthyl, thienyl, pyridyl, cycloalkyl having 3 to 7 carbon atoms, carboxy, $-\text{CONH}_2$, $-\text{SO}_3\text{H}$ and $-\text{R}^{11}$,

R^{11} represents alkyl group having 1 to 8 carbon atoms or alkenyl group having 2 to 8 carbon atoms, the alkyl group and the alkenyl group in R^{11} may be substituted with one or more groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl, piperidyl, pyrrolidyl, morpholyl, cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy, oxo, thioxo, carboxy, $-\text{CONH}_2$ and $-\text{SO}_3\text{H}$; and one or more methylenes which constitute the alkyl group and the alkenyl group may be replaced with any of phenylene, thienylene, furylene, cyclohexylene, cyclopentylene, $-\text{O}-$, $-\text{S}-$, $-\text{CO}_2-$, $-\text{NHCO}-$, $-\text{NR}^8-$, and $-\text{N}^+\text{W}^-\text{R}^9\text{R}^{10}$; R^8 , R^9 , R^{10} and W^- are the same as the above; and the group which is not involved in the formation of the monocyclo ring and the bicyclo ring in R^{5a} , R^{6a} and R^{7a} is the same as the above I); and

III) $\text{N}^+\text{R}^{5a}\text{R}^{6a}\text{R}^{7a}$ represents a pyridinium ring, a quinolinium ring or an isoquinolinium ring with a proviso that a position of binding to Z^a is the ammonium nitrogen atom; wherein the pyridinium ring, the quinolinium ring and the isoquinolinium ring may be substituted with one or more groups of cyano, nitro, phenyl, naphthyl, thienyl, pyridyl, cycloalkyl having 3 to 7

carbon atoms, alkoxy having 1 to 5 carbon atoms, carboxy, -CONH₂,
-SO₃H, halogen, hydroxy, tetrahydropyranyl and -R^{12a},

R^{12a} represents alkyl group having 1 to 9 carbon atoms
or alkenyl group having 2 to 9 carbon atoms, the alkyl group and
the alkenyl group in R^{12a} may be substituted with one or more
groups of phenyl, naphthyl, pyridyl, quinolyl, thienyl, furyl,
cycloalkyl having 3 to 7 carbon atoms, cyano, nitro, hydroxy,
oxo, thioxo, carboxy, -CONH₂ and -SO₃H; and one or more
methylenes which constitute the alkyl group and the alkenyl group
may be replaced with any of phenylene, thienylene, furylene,
cyclohexylene, cyclopentylene, -S-, -O-, -CO₂-, -NHCO-, -NR⁸-,
and -N⁺W⁻R⁹R¹⁰-;

R⁸, R⁹, R¹⁰ and W⁻ are the same as the above; and

X⁻ represents a counteranion.

3-9. (canceled)

10. (previously presented) A pharmaceutical composition
containing the compound according to claim 1 as an active
component.

11. (previously presented) The pharmaceutical
composition according to claim 10 wherein the pharmaceutical
composition is a cholesterol lowering agent.

12. (original) The pharmaceutical composition according to claim 11 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

13-21. (canceled)

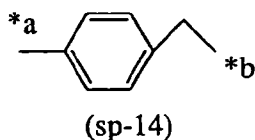
22. (previously presented) A pharmaceutical composition containing the compound according to claim 2 as an active component.

23. (previously presented) The pharmaceutical composition according to claim 22 wherein the pharmaceutical composition is a cholesterol lowering agent.

24. (previously presented) The pharmaceutical composition according to claim 23 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

25-40. (canceled)

41. (New) The compound according to claim 2 wherein Y represents -NHCSNH- at meta position, and Z^a represents the following formula (sp-14):



wherein *a binds to Y and *b binds to $N^+R^{5a}R^{6a}R^{7a}$ in the formula (1B).

42. (New) The compound according to claim 41 wherein R^1 and R^2 may be the same as or different from each other and each represents straight alkyl groups having 2 to 6 carbon atoms, and wherein $(R^3R^4N)_m$ represents any of dimethylamino group substituted at position 7, diethylamino group substituted at position 7, ethylmethylamino group substituted at position 7, dimethylamino group substituted at position 9 and dimethylamino groups substituted at two positions 7 and 9.

43. (New) The compound according to claim 42 wherein $(R^3R^4N)_m$ represents any of dimethylamino group substituted at position 7, diethylamino group substituted at position 7 or ethylmethylamino group substituted at position 7, and wherein $N^+R^{5a}R^{6a}R^{7a}$ represents a group selected from the group consisting of:

4-t-butylpyridinium;

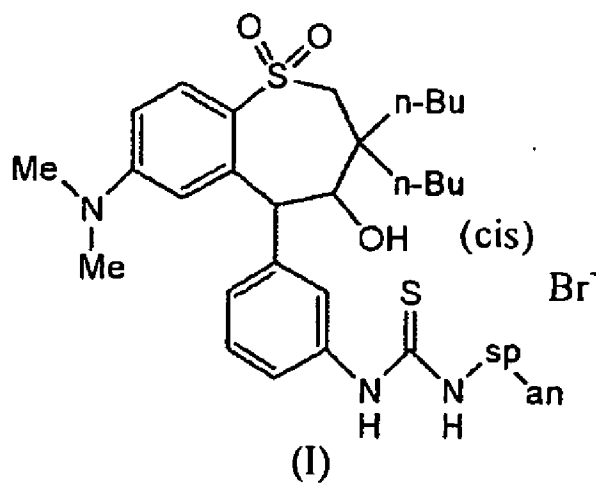
3-(3-hydroxypropyl)-pyridinium;

3-[2-(methoxycarbonyl)ethyl]-pyridinium;

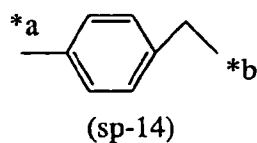
2-(n-propyl)-pyridinium;

4-phenylquinuclidinium; and
 1,4-diazabicyclo[2.2.2]octanium.

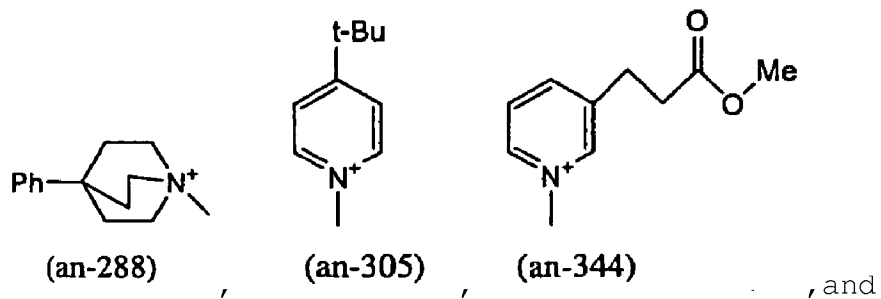
44. (New) A compound represented by the following
 formula (I):

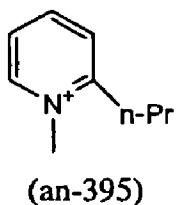


wherein (sp) is the following formula (sp-14)



wherein *a binds to -NHCSNH- and *b binds to (an); and
 (an) is selected from the group consisting of:





45. (New) The compound according to claim 44 wherein (sp) is the formula (sp-14), and (an) is the formula (an-288).

46. (withdrawn) The compound according to claim 44 wherein (sp) is the formula (sp-14), and (an) is the formula (an-305).

47. (withdrawn) The compound according to claim 44 wherein (sp) is the formula (sp-14), and (an) is the formula (an-344).

48. (withdrawn) The compound according to claim 44 wherein (sp) is the formula (sp-14), and (an) is the formula (an-395).

49. (New) A pharmaceutical composition containing the compound according to claim 41 as an active component.

50. (New) The pharmaceutical composition according to claim 49 wherein the pharmaceutical composition is a cholesterol

lowering agent.

51. (New) The pharmaceutical composition according to claim 49 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

52. (New) A pharmaceutical composition containing the compound according to claim 42 as an active component.

53. (New) The pharmaceutical composition according to claim 52 wherein the pharmaceutical composition is a cholesterol lowering agent.

54. (New) The pharmaceutical composition according to claim 53 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

55. (New) A pharmaceutical composition containing the compound according to claim 43 as an active component.

56. (New) The pharmaceutical composition according to claim 55 wherein the pharmaceutical composition is a cholesterol lowering agent.

57. (New) The pharmaceutical composition according to claim 56 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

58. (New) A pharmaceutical composition containing the compound according to claim 44 as an active component.

59. (New) The pharmaceutical composition according to claim 58 wherein the pharmaceutical composition is a cholesterol lowering agent.

60. (New) The pharmaceutical composition according to claim 59 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

61. (New) A pharmaceutical composition containing the compound according to claim 45 as an active component.

62. (New) The pharmaceutical composition according to claim 61 wherein the pharmaceutical composition is a cholesterol lowering agent.

63. (New) The pharmaceutical composition according to claim 62 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

64. (withdrawn) A pharmaceutical composition containing the compound according to claim 46 as an active component.

65. (withdrawn) The pharmaceutical composition according to claim 64 wherein the pharmaceutical composition is a cholesterol lowering agent.

66. (withdrawn) The pharmaceutical composition according to claim 65 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

67. (withdrawn) A pharmaceutical composition containing the compound according to claim 47 as an active component.

68. (withdrawn) The pharmaceutical composition according to claim 67 wherein the pharmaceutical composition is a cholesterol lowering agent.

69. (withdrawn) The pharmaceutical composition according to claim 68 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.

70. (withdrawn) A pharmaceutical composition containing the compound according to claim 48 as an active component.

71. (withdrawn) The pharmaceutical composition according to claim 70 wherein the pharmaceutical composition is a cholesterol lowering agent.

72. (withdrawn) The pharmaceutical composition according to claim 71 wherein the pharmaceutical composition is a therapeutic agent or a preventive agent for any of hyperlipemia, arteriosclerosis or syndrome X.